Office Action of 05/03/2007

Amendments to the Claims

Please amend the claims to read as follows:

1 - 16 (Canceled)

17. (Currently) Amended A method of making a reinforced smooth cementitious board having a cement skin adjacent to an outer face, comprising:

(a) depositing a reinforcement fabric and a layer of hydraulic cementitious material, one on the other, wherein the reinforcement fabric comprises an open mesh united with a thin, porous nonwoven web; for penetration by a portion of the layer of hydraulic cementitious material;

(b) penetrating the open mesh with the layer of hydraulic cementitious material and imbedding the open mesh in the layer of hydraulic material;

and wherein the thin, porous nonwoven web comprises alkali resistant polymer fibers having thereon a hydrophilic material to enhance wetting of the thin, porous nonwoven web by the layer of hydraulic cementitious material, and adhesion of the thin, porous nonwoven web to the layer of hydraulic cementitious material, and continuity of the layer of hydraulic cementitious material about the reinforcement fabric:

(c) promoting penetration through the thin, porous nonwoven web by a portion of the layer of hydraulic cementitious material to form the cement skin adjacent to the outer face by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material;

(d) (b) penetrating through the thin, porous nonwoven web by said portion of the layer of hydraulic cementitious material to form the cement skin adjacent to the outer face and embed to embed the reinforcement fabric the thin, porous web in the layer of hydraulic cementitious material at a depth from the outer face; and

Office Action of 05/03/2007

with continuity of the layer of hydraulic cementitious material about the reinforcement fabric, and to form the cement skin adjacent to the outer face with said portion of the layer of hydraulic cementitious material; and

(e) (e) curing the layer of hydraulic cementitious material to form a layer of hardened cementitious material imbedding the open mesh and the thin, porous nonwoven web reinforcement fabric at a depth from the outer face, wherein a portion of the layer of hardened cementitious material comprises the cement skin adjacent to the outer face.

18. (Previously Presented) The method of claim 17, wherein the layer of hydraulic cementitious material comprises a cementitious matrix material, further comprising:

penetrating the reinforcement fabric by the portion of the layer of hydraulic cementitious material, wherein the portion of the layer of hydraulic cementitious material comprises a portion of the cementitious matrix material.

19. (Previously Presented) The method of claim 17, further comprising:

forming the open mesh by encapsulating glass fibers with an alkali resistant material to provide encapsulated glass fibers, and joining the encapsulated glass fibers with a binder at intersection areas thereof within the open mesh; and

uniting the open mesh and the nonwoven web to comprise the reinforcement fabric.

20. (Previously Presented) The method of claim 17, further comprising:

forming the open mesh by coextruding an alkali resistant material with glass fibers to provide sheathed glass fibers sheathed by the alkali resistant material, and joining the sheathed glass fibers at intersection areas thereof within the open mesh; and

uniting the open mesh and the nonwoven web to comprise the reinforcement fabric.

21. (Previously Presented) The method of claim 17, further comprising:

forming the open mesh by wrapping glass fibers with fibers of an alkali resistant material, applying heat to fuse the fibers of the alkali resistant material and provide sheathed glass fibers sheathed by the alkali resistant material, and joining the sheathed glass fibers at intersection areas thereof within the open mesh; and

uniting the open mesh and the thin, porous nonwoven web to form the reinforcement fabric.

22. (Previously Presented) The method of claim 17, further comprising:

forming the reinforcement fabric by uniting the open mesh and the thin, porous nonwoven web, wherein the alkali resistant polymer fibers, having thereon the hydrophilic material, comprise polypropylene fibers having thereon the hydrophilic material.

23. (Previously Presented) The method of claim 17, further comprising:

forming the reinforcement fabric by uniting the open mesh and the thin, porous nonwoven web, wherein the alkali resistant polymer fibers, having thereon the hydrophilic material, comprise, a polymer or copolymer of, olefin, ethylene, butylene, vinyl, styrene or butadiene, having thereon the hydrophilic material, having thereon the hydrophilic material.

24. (Previously Presented) The method of claim 17, further comprising:

forming the nonwoven web as either a spun bonded web of the fibers having the hydrophilic material thereon or a carded web of the fibers having the hydrophilic material thereon; and

uniting the nonwoven web and the open mesh to comprise the reinforcement fabric.

25. (Previously Presented) The method of claim 17, further comprising:

forming the nonwoven web as either a spun bonded web of the fibers or a carded web of the fibers:

forming the open mesh by encapsulating glass fibers with an alkali resistant material to provide encapsulated glass fibers, and joining the encapsulated glass fibers at intersection areas thereof within the open mesh; and

uniting the open mesh and the nonwoven web to comprise the reinforcement fabric.

- 26. (Previously Presented) The method of claim 17, further comprising: uniting the open mesh and the nonwoven web by heat fusing them together.
- 27. (Previously Presented) The method of claim 17, further comprising: uniting the open mesh and the thin, porous nonwoven web by adhesive or stitching.
- 28. (Previously Presented) The method of claim 17, further comprising: prior to depositing the reinforcement fabric and the layer of hydraulic cementitious material one on the other, coating one or more of, surfactants, hydrophilic compounds, foam boosters/stabilizers and polar polymer topical solutions on the open mesh and on the thin, porous nonwoven web that comprises the alkali resistant polymer fibers having thereon the hydrophilic material.
- 29 (Previously Presented) The method of claim 17, further comprising: prior to depositing the reinforcement fabric and the layer of hydraulic cementitious material one on the other, applying a slurry having a cement powder and one or more of, hydrophilic additives, wetting agents, foaming agents and foam boosters to either or both of the open mesh and the thin, porous nonwoven web; and

drying the slurry.

ATTORNEY DOCKET NO: D1815-00138

30. (Previously Presented) The method of claim 17, further comprising depositing the layer of hydraulic cementitious material onto the reinforcement fabric thereby depositing one on the other; and

compacting the layer of hydraulic cementitious material and the reinforcement fabric.

32. (Previously Presented) The method of claim 30, further comprising:

prior to depositing the layer of hydraulic cementitious material onto the reinforcement fabric, coating one or more of, surfactants, hydrophilic compounds, foam boosters/stabilizers and polar polymer topical solutions on the open mesh and on the thin, porous nonwoven web that comprises the alkali resistant polymer fibers having thereon the hydrophilic material.

33. (Previously Presented) The method of claim 30, further comprising:

prior to depositing the layer of hydraulic cementitious material onto the reinforcement fabric, applying a slurry having a cement powder and one or more of, hydrophilic additives, wetting agents, foaming agents and foam boosters to either or both of the open mesh and the thin, porous nonwoven web; and

drying the slurry.

34. (Previously Presented) The method of claim 17, further comprising:

depositing the reinforcement fabric onto the layer of hydraulic cementitious material thereby depositing one on the other; and

compacting the reinforcement fabric and the layer of hydraulic cementitious material.

35. (Previously Presented) The method of claim 34, further comprising:

prior to depositing the reinforcement fabric onto the layer of hydraulic cementitious material, coating one or more of, surfactants, hydrophilic compounds, foam boosters/stabilizers

U.S. Serial No. 10/696,751 Amendment in response to Office Action of 05/03/2007

and polar polymer topical solutions on the open mesh and on the thin, porous nonwoven web that comprises the alkali resistant polymer fibers having thereon the hydrophilic material.

36 (Previously Presented) The method of claim 34, further comprising:

prior to depositing the reinforcement fabric onto the layer of hydraulic cementitious

material, applying a slurry having a cement powder and one or more of, hydrophilic additives,

wetting agents, foaming agents and foam boosters to either or both of the open mesh and the
thin, porous nonwoven web; and

drying the slurry.